

## REMEDIAL SITE ASSESSMENT DECISION - EPA REGION 10

Site Name: Aluminum Recycling Corp EPA ID#: WAD 980722979  
Alias Site Names: Hillyard Processing, Trentwood Site  
Address: North 2317 Sullivan Rd.  
City: Spokane County or Borough: \_\_\_\_\_ State: WA  
Report Type: SIP I Report Date: 6/21/93 Report Lead: EPA  
Report developed by: PRC

## DECISION:

☒ 1. Further Remedial Site Assessment under CERCLA (Superfund) is not required because:

☒ 1a. Site does not qualify for further remedial site assessment under CERCLA (Site Evaluation Accomplished - SEA)

☐ 1b. Site may qualify for further action, but is deferred to: ☐ RCRA ☐ NRC

☐ 2. Further Assessment Needed Under CERCLA:

2a. (optional) Priority: ☐ Higher ☐ Lower

2b. Activity ☐ PA ☐ ESI  
Type: ☐ SI ☐ HRS evaluation  
☐ Removal Assessment  
☐ Integrated Assessment  
☐ Other: \_\_\_\_\_

## DISCUSSION/RATIONALE:

USEPA SF



1589402

Report Reviewed and Approved by: Deborah G. Robinson Signature: dgr Date: 9/13/93  
Site Decision Made by: Deborah G. Robinson Signature: dgr Date: 9/13/93

### Instructions: Use of EPA Form #9100-3

**1) Filling blanks and boxes using a wordperfect version of the form:** This is most easily done in the 'typeover' (or insert) mode in wordperfect. Begin by hitting the 'insert' key on your keyboard, move to the line or box desired, and begin typing. The boxes are set up to give bold characters, and the line characters (" \_ ") ensure the form keeps a constant format. The form uses wordperfect version 5.1 and a 'universal scalable' font; you may need to revise printer setup to accommodate this. The diskette provided contains 2 versions of this form in Wordperfect 5.1 format (see point 2 below). These files have a write protection code.

**2) Discussion/Rationale Section:** The evaluator should enter comments as appropriate. To facilitate this, two versions of this form are provided in wordperfect files. Version "SA-DECIS.#1" contains the version found on the front side of this form. You can complete this form in writing or by using the 'typeover' mode when entering discussion text using wordperfect. Version "SA-DECIS.#2" has the exact same form, except the lines have been deleted from the discussion box. This box was created using 'Tables' in wordperfect 5.1, thus it can expand as new lines are added or scrolled within the box. The evaluator can simply enter text in the normal edit mode in wordperfect.

**3) Use of 'not applicable - (n/a)':** This can be entered wherever appropriate. For example, in cases where EPA wants to re-evaluate a previous decision based on new information and no report applies, the evaluator may enter 'N/A' for "report type" and "report date". The Discussion/Rationale section should explain what new information supports EPA's decision.

**4) Signature Boxes:** When using this form to document report approval, the Regionally designated person responsible to review and approve a final report should sign and date the "Report Reviewed and Approved by" line. Otherwise, reviewers can choose to sign their approval directly on a report and eliminate the "Report Reviewed and Approved by" signature box from this form.

The person responsible for deciding what, if any, further site assessment is required should complete the 'Site Decision Made by' line (note that this can be the same person who reviewed and approved a report). All dates should reflect when an actual review or decision is complete. Only site decision dates, and not site assessment report dates, need to roughly correspond to CERCLIS entry dates.

### Explanation of Entries

- 1) Site Name = same name as listed in CERCLIS
- 2) EPA ID = same as CERCLIS ID number
- 3) Alias site names = self explanatory
- 4) City, County or Parish, State = same as listed in CERCLIS
- 5) Report date = If applicable, date of final report associated with the site decision
- 6) SEA = Site Assessment Accomplished, the successor of No Further Remedial Action Planned (NFRAP)
- 7) RCRA = the Resource Conservation and Recovery Act (RCRA) program of EPA
- 8) NRC = the Nuclear Regulatory Commission
- 9) PA = Preliminary Assessment
- 10) SI = Site Inspection
- 11) SIP = Site Inspection Prioritization
- 12) ESI = Expanded Site Inspection
- 13) Regional Decision Team - a group of EPA Regional managers who evaluate the need for site assessment and response action at a site and formulate appropriate steps to address those needs.





June 21, 1993

Ms. Debbie Robinson  
U.S. Environmental Protection Agency, Region 10  
1200 Sixth Avenue, Mail Stop HW-114  
Seattle, WA 98101

Subject: Site Inspection Prioritization - Level I  
Aluminum Recycling Corporation (WAD98072279)  
Contract 068-W9-0009  
Work Assignment C1003922

Dear Ms. Robinson:

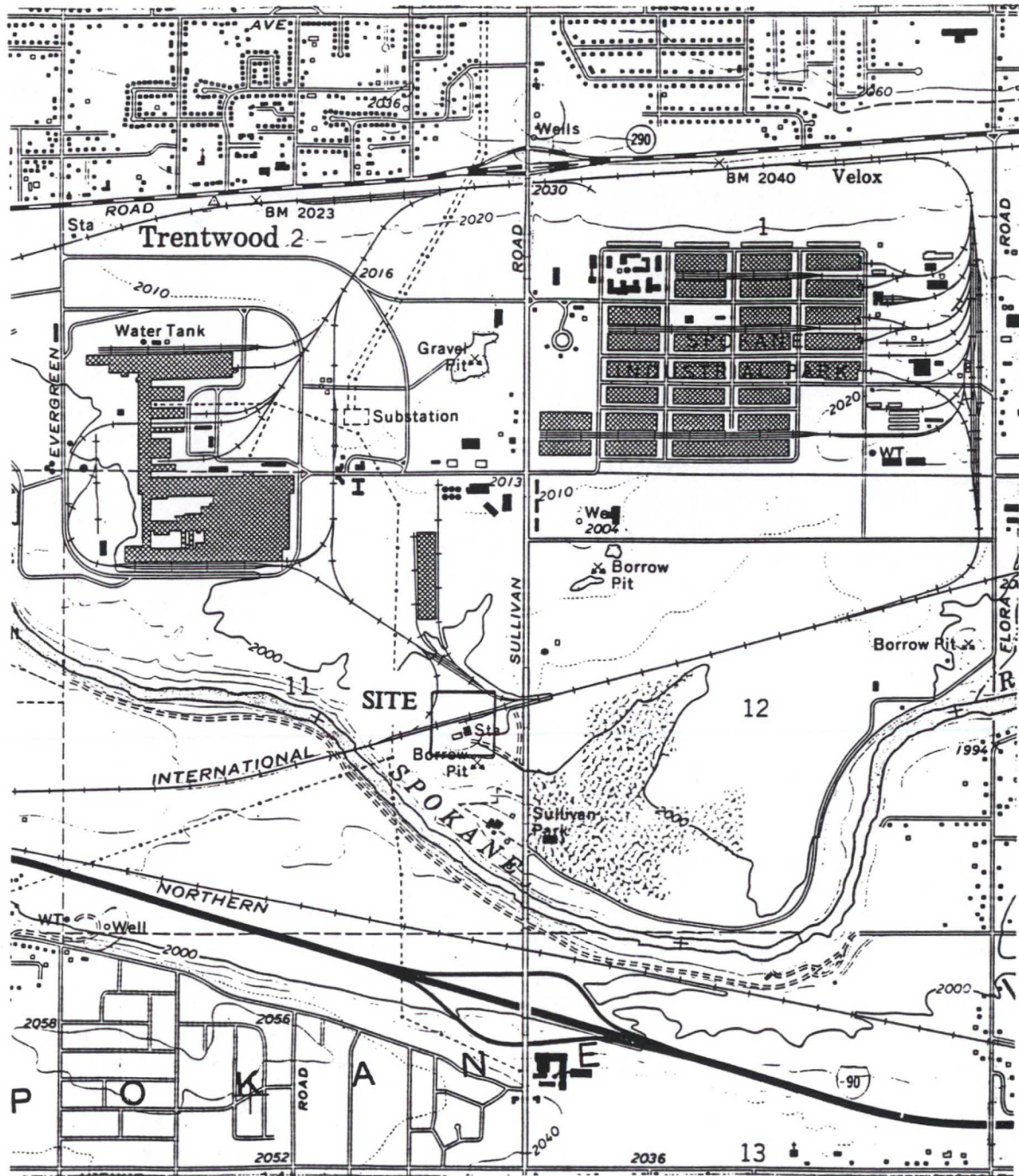
PRC Environmental Management, Inc. (PRC) has completed a Level I site inspection prioritization (SIP) for the Aluminum Recycling Corporation (ARC) site on Sullivan Road in Spokane, Washington. The evaluation was based primarily on information contained in the site file provided to PRC by the U.S. Environmental Protection Agency (EPA). Additional information was provided by Washington Department of Ecology (Ecology) Solid and Hazardous Waste Program and Toxics Cleanup Program personnel, other state and local agencies, and private parties. As described below, limited assumptions regarding hazardous substance quantities and characteristics were used based on professional judgment in the absence of other available data.

### **Background**

The ARC site is an approximately 14-acre industrial site at North 2317 Sullivan Road in Spokane, Washington. Figure 1 shows the location of the site, where from at least 1979 until 1985, two separate industrial facilities operated. ARC operated an aluminum recovery plant on the eastern third of the property. The Imperial West Chemical Company (IWC), which produced, among other things, aluminum sulfate for use in concrete, occupied the western two-thirds of the property. In 1985, ARC declared bankruptcy and ceased operations. IWC purchased much of ARC's assets at liquidation and currently has expanded its operations onto the portion of the site that ARC formerly occupied.

ARC's predecessors included Hillyard Processing and Hillyard Aluminum Recycling Corporation, which ran similar aluminum recovery operations at a nearby site on Wellesley Avenue in Spokane since at least 1955. Hillyard Processing Company installed a water supply well at the Sullivan Road site in 1966, suggesting that development at Sullivan Road may go back to the 1960s or earlier.

The ARC site is in Spokane County in an industrial area about 1 mile north of the residential area of Veradale, Washington. It is bordered by a county park (Sullivan Park) across Sullivan Road to the east and a park-and-ride lot to the south. Railroad tracks and undeveloped land border the site to the north and separate it from the Spokane River on the west. The site is relatively flat,



0 1 MILE

FIGURE 1  
SITE LOCATION MAP

Source: Greenacres, Wash. USGS Topo. Map

PRC Environmental Management, Inc.



but slopes steeply toward the park-and-ride lot and then to the Spokane River, about 700 feet to the south and west. Storm water falling on the site percolates into the gravelly soils or runs down slope to the Spokane River. The site file reports that run off from the park-and-ride area directly below the site flows through storm drains and ditches to the Spokane River. Moderately high-permeability soil extends 150 to 200 feet below the site to the Spokane-Rathdrum aquifer, a sole source aquifer water supply for the Spokane area.

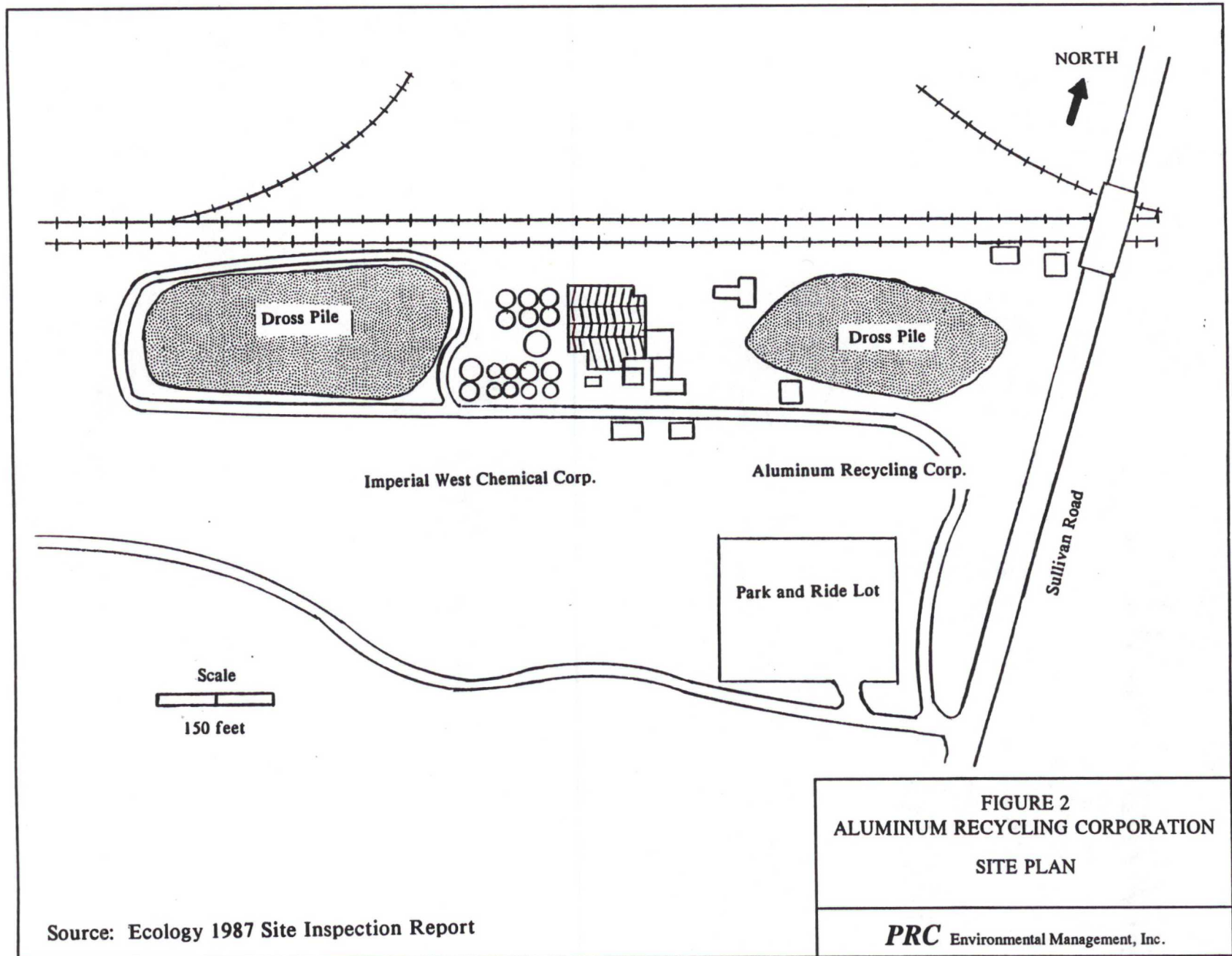
ARC's aluminum recovery process involved combining aluminum cans and aluminum smelting by-products with potash and sodium chloride in a gas-fired furnace. The mineral salts precipitated impurities, leaving pure aluminum metal. The resulting salt/impurity mixture, called dross, was stored in large, exposed piles, without liners or covers, outdoors on the site. Imperial West Chemical in turn used some of the dross as an ingredient in concrete. Dross piles are relatively common in the Spokane area, having been deposited at several locations from the time aluminum mills were built during World War II.

In 1982, Ecology ordered ARC to cover its waste dross piles to control dust emissions and runoff. ARC appealed the order and the subsequent fine until 1985, when it ceased operations. In 1986, a contractor working for Union Pacific Railroad, which is the owner of the site, finally removed the uncovered waste dross piles. In the meantime, however, IWC transported a large quantity of dross from ARC's razed Wellesley Avenue facility to the closed Sullivan Road plant for use in concrete manufacturing. IWC now leases both its and ARC's portions of the Sullivan Road site from Union Pacific Railroad and continues to use dross from two large, uncovered piles at the site. Access to the unfenced ARC site is not restricted.

In 1985, EPA Region 10 completed a potential hazardous waste site preliminary assessment and assigned the site a low priority. In October 1987, the Washington Department of Ecology inspected the site and completed its own preliminary assessment site inspection report. At the time of the Ecology inspection, two large piles of dross remained on site. Photographs taken during a 1980 EPA inspection show a wastewater settling basin on the site. Although Ecology did not include these in its field sketch during its 1987 site inspection, IWC reports that it currently uses the concrete settling basin on the ARC site for storing process water. Figure 2 is a sketch of the site conditions at the time of the 1987 inspection.

State of Washington public water supply data list a well that serves 15 workers at the ARC site. The 1966 well installation log contained in the site file may correspond to this well. Limited testing of the well for conventional pollutants in October 1985 showed the presence of chlorides, sodium, and potassium at 2.8 milligrams per liter (mg/L), 3.7 mg/L, and 3.6 mg/L, respectively, which is not significantly above background levels. IWC reports that there are also two monitoring wells on the site, but no sampling data are available from these wells.

The files document four events that suggest that releases may have occurred at the site. First, Ecology's 1987 site inspection report references a 1973 fish kill in the Spokane River that was attributed to runoff from the site. Second, in 1984, the Spokane County Air Pollution Control Authority cited ARC for seven baghouse opacity violations. Third, in 1983, Ecology Spokane Regional Office ordered ARC to construct berms and place engineered covers on the dross piles to prevent runoff and dust emissions. ARC never constructed the controls; instead, the company appealed the order and the subsequent fine for over 3 years, until 1985, when it ceased operations.





The file does not state whether Ecology's order was in response to an actual release of dross or merely intended to prevent potential releases. Finally, the file also references nuisance ammonia emissions from the settling basin into the air in the early 1980s. Each of these releases occurred while the plant was in operation; no releases have been reported since the plant ceased operations in 1985.

## Sources

**Dross Piles.** The dross piles are the primary contaminant source at the site. The dross is a grey, sand-like material stored in two large piles on gravel pads without liners or covers at the east and west ends of the site. The quantity of dross remaining at the site is uncertain; EPA's 1987 site inspection report estimates "thousands of tons." IWC estimates that the smaller of the two piles to be 7,500 cubic yards but does not know the quantity of the other. Based on the field sketch in Ecology's 1987 site inspection report and on field observation by PRC in 1993, 15,000 cubic yards is a conservative assumption.

ARC tested samples of dross in 1983 as part of a dangerous waste activity notification to Ecology. A mineral assay indicated that the dross contained on the order of 25 percent sodium chloride, 20 percent potassium chloride, 45 percent aluminum oxides, and 10 percent aluminum. RCRA EP Tox metals testing conducted on 1983 samples of "aged" dross showed elevated concentrations of barium (750 micrograms per liter [ $\mu\text{g/L}$ ]), lead (260  $\mu\text{g/L}$ ), arsenic (136  $\mu\text{g/L}$ ), and selenium (158  $\mu\text{g/L}$ ). The dross was alkaline, with a pH of 10. Freshly disturbed samples were reported to emit an ammonia smell.

Although none of the EP Tox results exceeded the RCRA characteristic hazardous waste levels at the time, Ecology determined that the dross was a Washington dangerous waste under Washington Administrative Code chapter 173-303 sections 101 and 9906, toxic waste criteria because the high concentration of salts in the dross resulted in oral rat toxicity, causing the dross to fail the "book designation" procedures for the toxic waste criteria.

The 1983 testing data contained in the site file may not accurately represent the dross that remains on the site. The 1983 dross was "high-salt" dross. File records state that by 1986, Union Pacific Railroad had removed all of the high-salt dross from the site and disposed of it in the nearby Mica-Dishman landfill. The dross that is currently on site reportedly is "low-salt" dross that IWC transported from ARC's defunct Wellesley Avenue site in the mid-1980s.

Because the existing dross came from the Wellesley Avenue site, TCLP metals data recently obtained from Wellesley Avenue site dross may be more representative than the 1983 data. Results from five samples show consistently elevated levels of barium (0.56 to 5.8 mg/L), with non detectable levels of arsenic, cadmium, lead, mercury, selenium, and silver. Chromium was detected at 0.39 mg/L in one sample. Aluminum was not tested for, and no data are available on ammonia. These data tend to confirm the opinion of local groundwater officials that the primary contaminants of concern in the dross piles are chlorides, which are conventional pollutants, rather than metals or other hazardous substances.

**Settling Basin.** The on-site wastewater settling basin is also a potential contaminant source. The site file contains 1980 photographs showing a concrete settling basin, but no other information about it. The pond is noted in the 1986 revision of the USGS topographic map. IWC reportedly uses the concrete settling basin to store process makeup water. No information is available about

the constituents of the wastewater or sludge when ARC used the pond in the early 1980s. Although the file contains no evidence of releases from the basin, it is a potential contaminant source.

### **Recommendations**

Based on conversations with Spokane County groundwater officials, potential contamination of groundwater by sodium and potassium chlorides leaching from the dross piles during wet weather appears to be the chief health and environmental concern at the site. Chloride salts are not CERCLA hazardous substances. Therefore, unless the concentrations of ammonia, aluminum, barium, or other hazardous substances in the dross can be verified, no CERCLA action can be undertaken on the dross piles. Testing of the dross piles, underlying soil, and groundwater for CERCLA hazardous substances is needed to determine whether the dross piles pose a health and environmental risk under CERCLA.

### **Information Sources**

Information used to develop this SIP report was derived from the following documents contained in the EPA site file:

Ecology and Environment, Inc. 1988. Site Inspection Reassessment/Preliminary HRS Score for Aluminum Recycling Corporation, Spokane, Washington. Prepared for EPA.

U.S. Environmental Protection Agency 1988. Potential Hazardous Waste Site Inspection Report.

U.S. Environmental Protection Agency 1985. Potential Hazardous Waste Site Preliminary Assessment.

Washington Department of Ecology 1987. Phase 1 Site Inspection Report, Aluminum Recycling Corporation Trentwood, Spokane, Washington.

State of Washington Public Water Supply Listing, 03/20/85.

Environmental Management Resources, Inc., Results of Dross Sampling and Analysis, September, 1992.

The following individuals were also consulted:

Mr. Sherman Spencer, Washington Department of Ecology Eastern Regional Office Toxics Cleanup Program. (509) 456-2962 (personal communication).

Mr. Stan Miller, Spokane Aquifer Program Manager, Spokane County Engineering Department, (509) 456-3600 (personal communication).

Mr. Marty Coleman, Imperial West Chemical Company, (509) 922-2244 (personal communication).



Ms. Debbie Robinson  
June 21, 1993  
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The contact for the ARC site is:

John Huckaby  
Imperial West Chemical Co.  
N. 2315 Sullivan Road  
Spokane, WA 99216  
(509) 992-2244

A CERCLA/National Priority List eligibility checklist is attached. Please contact me or Mary Bandrowski at (206) 624-2692 if you have questions about this SIP.

Sincerely,

A handwritten signature in dark ink, appearing to read "Tom Slocum". The signature is fluid and cursive, with the first name "Tom" and last name "Slocum" clearly distinguishable.

Tom Slocum  
Site Manager

EPA REGION 10  
CERCLA/NPL ELIGIBILITY CHECKLIST  
(CHECK ALL THAT APPLY)  
SITE NAME: Aluminum Recycling Corp. Trentwood DATE: 5/15/93

- PETROLEUM EXCLUSION
  - ☐ exempt wastes present
- NRC
  - ☐ a federally licensed facility
- PESTICIDE SITE
  - ☐ legal application of pesticides in vicinity
- INDOOR AIR POLLUTANTS
  - ☐ present
- METHANE
  - ☐ present
- FEDERALLY PERMITTED RELEASE
  - ☐ present (specify-
- MINING SITE
  - ☐ excluded waste (see 54 FR 15316)
- AGGREGATION ISSUES
  - ☐ ground-water plumes - likely sources identified
  - ☐ sediment contamination - likely sources identified
  - ☐ non-contiguous areas of concern
  - ☐ other (specify-
- RCRA
  - ☐ protective filer
  - ☐ non-notifier
  - ☐ convertor
  - ☐ generator or transportor
  - ☐ late filer
  - ☐ permit issued before HSWA (1984)
  - ☐ owner bankrupt
  - ☐ unwilling (see 53 FR 30005)
  - ☐ inability to pay (see 53 FR 30002)
  - ☐ TSD (give status and dates)

☒ NONE APPLY